

Appl. No. 10/022,861
Paper dated March 13, 2006
Reply to Office Action dated December 13, 2005

Docket No. 1232-4801

Amendments to the Claims:

Claims 1, 2, 4-27, 29-53 are pending in this application. Please cancel claims 2, 8, 15, 27, 33, 40 and 51-53 without prejudice or disclaimer, amend claims 1, 4-7, 9-11, 14, 16, 18-20, 22, 23, 26, 29-30, 34-36, 41-43 and 45-48, and add new claim 54 as follows.

The following Listing Of Claims will replace all prior versions, and listings, of claims in the application.

Listing Of Claims:

Claim 1 (Currently Amended): ~~An image reading apparatus capable of performing a read-while-feed operation in which an original is read while being fed by an image sensor placed at a fixed position,~~ comprising:

an image sensor adapted to read an image of an original;

a document feeder adapted to feed said original to a platen;

a detector adapted to detect presence/absence of dust and/or dirt on [a] said platen; and

a controller adapted to [inhibit the read-while-feed operation in a case where dust and/or dirt are detected at all of a plurality of predetermined positions by said detector,] notify the presence of dust and/or dirt on said platen in response to the detection of presence of dust or dirt by said detector, and clear the notification via a notification unit, and allow the read-while-feed operation when removal of dust and/or dirt on the platen is detected in a state that the read-while-feed operation is inhibited;

a document feeder for feeding an original to the platen;

wherein said controller determines that dust and/or dirt on the platen is removed in response to an opening operation of the document feeder.

Claim 2 (Canceled):

Claim 3 (Canceled)

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Claim 4 (Currently amended): The image reading apparatus according to claim 1, wherein when said detector does not detect dust ~~and/or~~ dirt at least at one of the a plurality of predetermined positions, said controller controls to perform ~~the~~ a read-while-feed operation, in which an original is read while being fed by said image sensor placed at a fixed position, at the position where no dust or dirt is detected.

Claim 5 (Currently amended): The image reading apparatus according to claim 1, wherein said controller controls said detector to perform detection after a read-while-feed operation in which an original is read while being fed by said image sensor placed at a fixed position.

Claim 6 (Currently amended): The image reading apparatus according to claim 1, wherein if said detector detects dust or dirt at all of the a plurality of predetermined positions, said controller notifies the presence of the dust or dirt on the platen ~~via the notification unit~~ right after the detection.

Claim 7 (Currently amended): The image reading apparatus according to claim 1, wherein if said detector detects dust or dirt at all of the a plurality of predetermined positions, said controller notifies the presence of the dust or dirt on the platen ~~via the notification unit~~ in advance of a reading operation of an original.

Claim 8 (Canceled):

Claim 9 (Currently amended): The image reading apparatus according to claim 5 further comprising a memory adapted to, when said detector does not detect dust ~~and/or~~ dirt at least at one of the a plurality of predetermined positions, store the position having no dust or dirt, wherein said controller controls to perform the read-while-feed operation at the stored position.

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Claim 10 (Currently amended): The image reading apparatus according to claim 1, wherein said apparatus is capable of performing a stationary reading operation in which an original is held at a fixed position on the platen and read while moving an said image sensor,

and wherein if said detector detects dust or dirt at all of ~~the~~ a plurality of predetermined positions, said controller sets to perform the stationary reading operation.

Claim 11 (Currently amended): The image reading apparatus according to claim 1, wherein said controller turns on a flag indicative of inhibition of ~~the~~ a read-while-feed operation ~~upon~~ inhibiting to inhibit the read-while-feed operation in which an original is read while being fed by said image sensor placed at a fixed position in a case where dust or dirt is detected by said detector, and turns off the flag upon allowing the read-while-feed operation.

Claim 12 (original): The image reading apparatus according to claim 11 further comprising a flag determination unit for determining on/off of the flag indicative of inhibition of the read-while-feed operation,

wherein said apparatus is capable of performing a stationary reading operation in which an original is held at a fixed position on the platen and read while moving an image sensor,

and wherein said controller controls to perform the stationary reading operation when said flag determination unit determines that the flag is on, and controls to perform the read-while-feed operation when said flag determination unit determines that the flag is off.

Claim 13 (original): The image reading apparatus according to claim 1 further comprising an operation unit adapted to designate disabling of said detector,

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wherein said controller disables said detector in response to the designation by said operation unit.

Claim 14 (Currently amended): The image reading apparatus according to claim 1 further comprising a size detector adapted to detect a size of an original,

wherein plural sets of positions are prepared for different sizes of originals to be read as ~~said plurality of predetermined positions~~, and said controller controls said detector to perform the detection at a plurality of predetermined positions depending upon the detected size of the original.

Claim 15 (Canceled):

Claim 16 (Currently amended): An image reading apparatus ~~capable of performing a read-while feed operation in which an original is read while being fed by an image sensor placed at a fixed position~~, comprising:

an image sensor adapted to read an image of an original;

a document feeder adapted to feed said original to a platen;

a dust or dirt detector adapted to detect presence/absence of dust ~~and~~ or dirt on [a] said platen;

an original size detector adapted to detect a size of said original; and

a controller adapted to perform a read-while-feed operation in which an original is read while being fed by said image sensor placed at a predetermined position corresponding to the size of said original detected by said original size detector while said original is fed by said document feeder and inhibit the read-while-feed operation to read said original in a case where said dust or dirt detector detects the presence of dust ~~and~~ or dirt on said platen at said predetermined position ~~at all of a plurality of predetermined positions, and, in a case where said~~

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~~detector does not detect dust and/or dirt at least at one of the plurality of predetermined positions, control to perform the read-while-feed operation at the position where no dust or dirt is detected, wherein plural sets of positions are prepared for different sizes of originals to be read as said plurality of predetermined positions, and said controller controls said detector to perform the detection at a plurality of predetermined positions set in accordance with the size of the original.~~

Claim 17 (original): The image reading apparatus according to claim 16, wherein said controller controls said detector to perform detection after a read-while-feed operation.

Claim 18 (Currently amended): The image reading apparatus according to claim 16 further comprising a notification unit for notifying presence of dust or dirt on the platen if said dust or dirt detector detects dust or dirt at all of the a plurality of predetermined positions.

Claim 19 (Currently amended): The image reading apparatus according to claim 18, wherein if said dust or dirt detector detects dust or dirt at all of the plurality of predetermined positions, said notification unit notifies the presence of the dust or dirt on the platen right after the detection.

Claim 20 (Currently amended): The image reading apparatus according to claim 18, wherein if said dust or dirt detector detects dust or dirt at all of the plurality of predetermined positions, said notification unit notifies the presence of the dust or dirt on the platen in advance of a reading operation of an original.

Claim 21 (original): The image reading apparatus according to claim 18, wherein the notification unit comprises a display device, and the apparatus further comprises an operation unit adapted to designate to clear the displayed notification of the presence of the dust or dirt.

Claim 22 (Currently amended): The image reading apparatus according to claim 16 further comprising a memory adapted to, when said dust or dirt detector does not detect dust ~~and/~~ or dirt at least at one of the a plurality of predetermined positions, store the position having no dust or dirt in relation with a size of a document detected by said original size detector,

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wherein said controller controls to perform the read-while-feed operation at the stored position.

wherein said controller controls to perform the read-while-feed operation at the stored position.

Claim 23 (Currently amended): The image reading apparatus according to claim 16, wherein said apparatus is capable of performing a stationary reading operation in which an original is held at a fixed position on the platen and read while moving an image sensor,

and wherein if said dust or dirt detector detects dust or dirt at all of the a plurality of predetermined positions, said controller sets to perform the stationary reading operation.

Claim 24 (original): The image reading apparatus according to claim 16, wherein said controller turns on a flag indicative of inhibition of the read-while-feed operation upon inhibiting the read-while-feed operation, and turns off the flag upon allowing the read-while feed operation.

Claim 25 (original): The image reading apparatus according to claim 24 further comprising a flag determination unit for determining on/off of the flag indicative of inhibition of the read-while-feed operation,

wherein said apparatus is capable of performing a stationary reading operation in which an original is held at a fixed position on the platen and read while moving an image sensor,

and wherein said controller controls to perform the stationary reading operation when said flag determination unit determines that the flag is on, and controls to perform the read-while-feed operation when said flag determination unit determines that the flag is off.

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Claim 26 (currently amended): A control method for controlling an image reading apparatus ~~capable of performing a read while feed operation in which an original is read while being fed by an image sensor placed at a fixed position,~~ comprising:

reading an image of an original;

feeding said original to a platen;

detecting presence/absence of dust and/or dirt on [a] said platen; and

~~inhibiting the read while feed operation in a case where dust and/or dirt are detected at all of a plurality of predetermined positions;~~

notifying the presence of dust and/or dirt on said platen in response to the detection of presence of dust or dirt, and clearing the notification in response to an opening operation of a document feeder. via a notification unit in a case where dust and/or dirt are detected at all of a plurality of predetermined positions;

~~determining whether or not dust and/or dirt on the platen is removed in a state that the read while feed operation is inhibited; and~~

~~allowing the read while feed operation when removal of dust and/or dirt on the platen is determined,~~

~~wherein the image reading apparatus comprises a document feeder for feeding an original to the platen, and it is determined that dust and/or dirt on the platen is removed in response to an opening operation of the document feeder.~~

Claim 27 (Canceled):

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Claim 28 (Canceled)

Claim 29 (Currently amended): The control method according to claim 26 further comprising controlling, when no dust or dirt is detected at least at one of ~~the~~ a plurality of predetermined positions, to perform ~~the~~ a read-while-feed operation, in which an original is read while being fed by an image sensor placed at a fixed position, at the position where no dust or dirt is detected.

Claim 30 (Currently amended): The control method according to claim 26, wherein the detection of dust and/or dirt is performed after a read-while-feed operation in which an original is read while being fed by an image sensor placed at a fixed position.

Claim 31 (original): The control method according to claim 26, wherein the notification of the presence of the dust or dirt on the platen is performed right after the detection.

Claim 32 (original): The control method according to claim 26, wherein the notification of the presence of the dust or dirt on the platen is performed in advance of a reading operation of an original.

Claim 33 (Canceled):

Claim 34 (currently amended): The control method according to claim 30 further comprising:

storing, when no dust or dirt is detected at least at one of ~~the~~ a plurality of predetermined positions, the position having no dust or dirt; and

controlling to perform the read-while-feed operation at the stored position.

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Claim 35 (Currently amended): The control method according to claim 26, wherein the image reading apparatus is capable of performing a stationary reading operation in which an original is held at a fixed position on the platen and read while moving an image sensor,

further comprising setting, if dust or dirt is detected at all of ~~the~~ a plurality of predetermined positions, to perform the stationary reading operation.

Claim 36 (currently amended): The control method according to claim 26 further comprising:

turning on a flag indicative of inhibition of ~~the~~ a read-while-feed operation ~~upon~~ inhibiting to inhibit the read-while-feed operation in which an original is read while being fed by an image sensor placed at a fixed position in a case where dust or dirt is detected by a detector;
and

turning off the flag upon allowing the read-while-feed operation.

Claim 37 (original): The control method according to claim 36, therein the image reading apparatus is capable of performing a stationary reading operation in which an original is held at a fixed position on the platen and read while moving an image sensor, further comprising:

determining on/off of the flag indicative of inhibition of the read-while-feed operation;

controlling to perform the stationary reading operation when the flag is on; and

controlling to perform the read-while-feed operation when the flag is off.

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Claim 38 (original): The control method according to claim 26, wherein the image reading apparatus comprises an operation unit adapted to designate skipping the detection of dust and/or dirt,

further comprising skipping the detection of dust and/or dirt in response to the designation by said operation unit.

Claim 39 (original): The control method according to claim 26 further comprising detecting a size of an original,

wherein plural sets of positions are prepared for different sizes of originals to be read as said plurality of predetermined positions, and the detection of dust and/or dirt is performed at a plurality of predetermined positions depending upon the detected size of the original.

Claim 40 (Canceled):

Claim 41 (Currently amended): A control method for controlling an image reading apparatus ~~capable of performing a read-while-feed operation in which an original is read while being fed by an image sensor placed at a fixed position,~~ comprising:

detecting presence/absence of dust and/or dirt on a platen;

detecting the size of an original;

performing a read-while-feed operation in which an original is read while being fed by an image sensor placed at a predetermined position corresponding to the size of said original while said original is fed by a document feeder and inhibiting the read-while-feed

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operation to read said original in a case where said dust and/ or dirt are detected on said platen at said predetermined position, ~~at all of a plurality of predetermined positions; and~~

~~performing, in a case where no dust or dirt is detected at least at one of the plurality of predetermined positions, the read-while-feed operation at the position where no dust or dirt is detected;~~

~~wherein plural sets of positions are prepared for different sizes of originals to be read as said plurality of predetermined positions, and the detection of dust and/or dirt is performed at a plurality of predetermined positions set in accordance with the size of the original.~~

Claim 42 (Currently amended): The control method according to claim 41, herein the detection of dust and/ or dirt is performed after a read-while-feed operation.

Claim 43 (Currently amended): The control method according to claim 41, further comprising notifying presence of dust or dirt on the platen if dust or dirt are detected at all of ~~the~~ a plurality of predetermined positions.

Claim 44 (original): The control method according to claim 43, herein the notification of the presence of the dust or dirt on the platen is performed right after the detection.

Claim 45 (Currently amended): The control method according to claim 43 ~~48~~, herein the notification of the presence of the dust or dirt on the platen is performed in advance of a reading operation of an original.

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Claim 46 (Currently amended): The control method according to claim ~~43~~ 48, wherein the notification of the presence of the dust or dirt on the platen comprises displaying, and the image reading apparatus comprises an operation unit adapted to designate to clear the displayed notification of the presence of the dust or dirt.

Claim 47 (Currently amended): The control method according to claim 41 further comprising:

storing, when no dust or dirt is detected at least at one of ~~the~~ a plurality of predetermined positions, the position having no dust or dirt in relation with a detected size of a document; and

controlling to perform the read-while-feed operation at the stored position.

Claim 48 (Currently amended): The control method according to claim 41, wherein the image reading apparatus is capable of performing a stationary reading operation in which an original is held at a fixed position on the platen and read while moving an image sensor,

further comprising setting, if dust or dirt is detected at all of ~~the~~ a plurality of predetermined positions, to perform the stationary reading operation.

Claim 49 (original): The control method according to claim 41 further comprising:

turning on a flag indicative of inhibition of the read-while-feed operation upon inhibiting the read-while-feed operation; and

turning off the flag upon allowing the read-while-feed operation.

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Claim 50 (original): The control method according to claim 49, wherein the image reading apparatus is capable of performing a stationary reading operation in which an original is held at a fixed position on the platen and read while moving an image sensor, further comprising:

determining on/off of the flag indicative of inhibition of the read-while-feed operation;

controlling to perform the stationary reading operation when the flag is on; and

controlling to perform the read-while-feed operation when the flag is off.

Claim 51 (Canceled):

Claim 52 (Canceled):

Claim 53 (Canceled):

Claim 54 (new)

The image reading apparatus according to claim 16, wherein said controller inhibits the read-while-feed operation in a case where said dust or dirt detector detects dust or dirt at all of a plurality of predetermined positions.